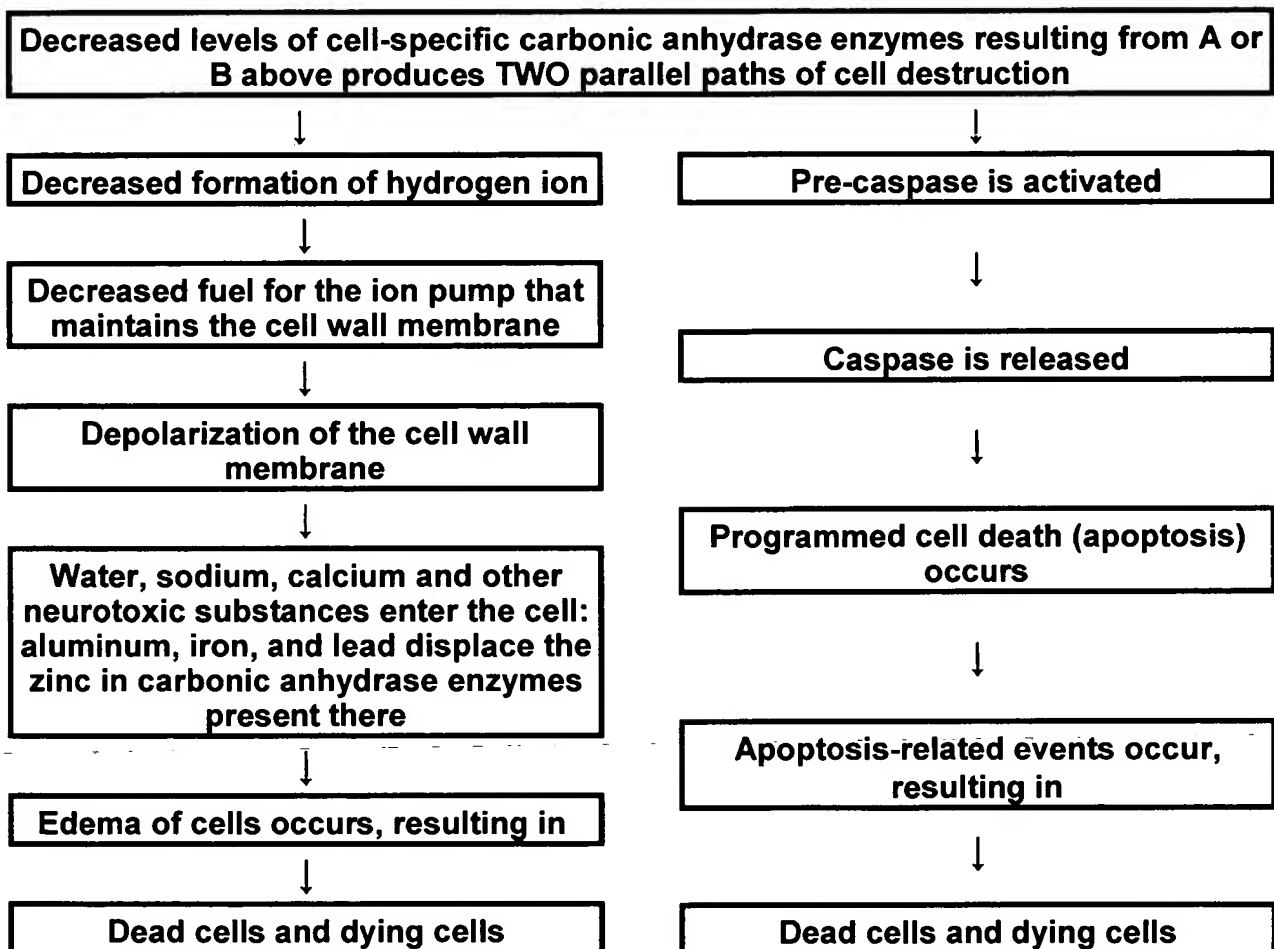


PATHOPHYSIOLOGY OF ALZHEIMER'S DISEASE AND OTHER NEURODEGENERATIVE DISORDERS

- A. Primary deficiency of cell-specific carbonic anhydrase enzyme due to defective gene-linked carbonic anhydrase enzymes
- B. Secondary deficiency of cell-specific carbonic anhydrase enzyme due to:
1. Neurotoxic materials, such as aluminum, iron, and lead
 2. Infections that alter the blood-brain barrier
 3. Amyloid deposits that alter the blood-brain barrier
 4. Other conditions or diseases that alter the blood-brain barrier that displace the zinc from cell-specific carbonic anhydrase enzymes



— DEAD AND DYING CELLS INCLUDE NEURONS (BRAIN CELLS) —
(Neuro-fibrillary tangles and tau proteins)

Sensory neurons (smell, taste) affected by carbonic anhydrase VI	Motor neurons	Other neurons
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Fig. 1